WIPRO QUESTIONS

1) What can?t be changed by the user program (Four choices were there).

Ans. Memory Map (Check it out).

2) In which layer ROUTING is performed ?

Ans. Network Layer

3) What is the output of the following code snippet

```
main()
{
 printf(5+?Fascimile?);
}
```

Ans. mile

4) What is the output

```
Int count=10,sum=0,*temp;
Temp=&count;
Sum=? &count;( It was actually given temp=? &count; which is probably wrong)
Printf(?sum=%d count= %d temp=%d ?,sum,count,*temp);
```

Ans. C (most expected answer ,check it)

5)Which one has no L-Value

[i] a[i]

[ii] i

[iii] 2

[iv] *(a+i)

Ans . [iii]

6) Which is true for binary search ?

[i] Traversal scheme

[ii]

[iii]Greedy algorithm

[iv] Divide and conquer algorithm

Ans. [iv]

7) What is the protocol used for getting the physical address
by supplying IP address of a node ?

[i] ARP

[ii] RARP

[iii] BOOTP

[iv] DHCP

Ans. [i]

8) If DELHI is coded as CCIDD then how BOMBAY will be coded?
Opposite meaning of SPUR.
Opposite of HARBINGER .

Ans. Follower

9) Opposite meaning of RESTIVENESS.

Ans.Docility.

10 . Find the analogy : SURPRISE : EXCLAMATION

Ans. Dismay:groan.

11)For each hour an watch is going slow by 30 seconds.Now time is

8a.m.What will be the actual time at 8p.m.

Ans:54.

12) To enter one?s club the guard asks some password.
For the first man the guard told ?twelve?,
then the man replied ?six? and he was let in.
then the second man came and guard told ?six? and the man replied ?three?
and he was le in. then another man came, the guard told ?ten? and
the man replied ?five?, but he was not let in.
What the man should have told to enter?

A) 2 b) 3 c) 6 d) 1

ans: b)

13) 1,2,5,10,17,26,__

ans: 37

14) two friends starts to ride motor bike opposite to each other
and are separated by 36 km.they both ride with the speed of 6 kmph.
A fly travels with the speed of 18 kmph to and fro between two friends.
The starts to travel from one of the friends. What is the distance
traveled by the fly when the friends meet?

Ans: 54 km

15) A frog climbs a wall of 15 ft. it takes 1 hr to climb 3 ft.
then it takes rest for 30 min. but while taking rest it slips 2 ft.
what is the time taken by the frog to reach the top?

Ans: 19hrs

16) Total tickets 105, adults---- 2.50/ticket, student------ 1.10/ticket.

Total amount = 221.90. find number of adult ticket sold?

17) There are certain number of apples.

If one puts 10 per packet then last packet contains 9,

if he puts 9 per packet then last packet contains 8 and so on?.

Find the total number of apples?

Ans: 2159

18) If the letters of the word "rachit" are arranged in all possible ways
and these words are written out as in a dictionary,
what is the rank of the word "rachit".

(a) 485
(b) 480
(c) 478
(d) 481

Ans. (d)

19) Ravi's salary was reduced by 25%.Percentage increase
to be effected to bring the salary to the original level is

(a) 20%
(b) 25%
(c) 33 1/3%
(d) 30%

Ans. (c)

20) A and B can finish a piece of work in 20 days .
B and C in 30 days and C and A in 40 days.
In how many days will A alone finish the job

(a) 48
(b) 34 2/7
(c) 44
(d) 45

Ans. (a)

21) How long will a train 100m long travelling at 72kmph take
to overtake another train 200m long travelling at 54kmph

(a) 70sec
(b) 1min
(c) 1 min 15 sec
(d) 55 sec

Ans. (b)

22) What is the product of the irrational roots of
the equation (2x-1)(2x-3)(2x-5)(2x-7)=9?

(a) 3/2
(b) 4
(c) 3
(d) 3/4

Ans. (a)

23) All toffees are chocolates Some toffees are not good for health

(a) Some chocolates are not good for health
(b) Some toffees are good for health
(c) No toffees are good for health
(d) Both (a) and (b)

Ans. (a)

The questions are based on the following pattern.
The problems below contain a question and two statements giving certain data. You have to decide whether the data given in the statements are sufficient for answering the questions.
The correct answer is

(A) If statement (I) alone is sufficient but statement (II) alone is not sufficient.
(B) If statement(II) alone is sufficient but statement(I) alone is not sufficient.
(C) If both statements together are sufficient but neither of statements alone is sufficient.
(D) If both together are not sufficient.
(E) If statements (I) and (II) are not sufficient

24) What is the volume of a cubical box in cubic centimetres?

(I) One face of the box has an area of 49 sq.cms.
(II) The longest diagonal of the box is 20 cms.

Ans. D

25) Is z positive?

(I) y+z is positive
(II) y-z is positive

Ans. E

26) Is x>y ? x, y are real numbers?

(I) 8x = 6y
(II) x = y + 4

Ans. B

27) If a ground is rectangular, what is its width?

(I) The ratio of its length to its breadth is 7:2
(II) Perimeter of the playground is 396 mts.

Ans. C

28) If the present age of my father is 39 yrs and my present age is x yrs, what is x?

(I) Next year my mother will be four times as old as i would be.
(II) My brother is 2 years older than I and my father is 4 years older than my mother.

Ans. C

29) How many brothers and sisters are there in the family of seven children?

(I) Each boy in the family has as many sisters as brothers
(II) Each of the girl in the family has twice as many brothers as sisters

Ans. D

30) x is not equal to 0, is x + y = 0?

(I) x is the reciprocal of y
(II) x is not equal to 1

Ans. A

Following questions are based on letter's analogy.
First pair of letters should have the same relationship as
the second pair of letters or vice versa.

31) ? : BGLQ : : YDIN : VAFK

(a) EKNS
(b) DKMT
(c) DLMS
(d) EJOT

Ans. (d)

32) NLO : RPS : : ? : ZXA

(a) VUW
(b) VTR
(c) VTW
(d) TRP
Ans. (c)

33) If "segment" is coded as rffndou, then "ritual" is coded as

(a) shutbm
(b) qjutbk
(c) qhutbk
(d) qhubtk

Ans. (c)

34) If "football" is "cricket" ,"cricket" is "basketball" ,
"basketball" is "volleyball","volleyball" is "khokho"
and "khokho" is cricket, which is not a ball game?

(a) cricket
(b) football
(c) khokho
(d) basketball

Ans. (a)

35) Which of the following is a recursive set of production

(a) S --> a|A, A --> S
(b) S --> a|A, A --> b
(c) S -->aA, A-->S
(d) None of these

Ans. (c)

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statement(I) alone is not sufficient.
(C) If both statements together are sufficient but
neither of statements alone is sufficient.
(D) If both together are not sufficient.
?

36) What is John's age?

(I) In 15 years John will be twice as old as Dias would be
(II) Dias was born 5 years ago

Ans. (C)

37) What is the distance from city A to city C in kms?

(I) City A is 90 kms from City B
(II) City B is 30 kms from City C

Ans. (D)

38) Is A=C ? A,B,C are real numbers

(I) A-B=B-C
(II) A-2C = C-2B

Ans. (C)

39) What is the 30th term of a given sequence ?

(I) The first two terms of the sequence are 1,1/2
(II) The common difference is -1/2

Ans. (A)

40) Was Avinash early, on time or late for work?

(I) He thought his watch was 10 minutes fast
(II) Actually his watch was 5 minutes slow

Ans. (D)

41) What is the value of A if A is an integer?

(I) A4 = 1
(II) A3 + 1 = 0

Ans. (B)

42) A person travels 12 km in the southward direction and then travels 5km to the right and then travels 15km toward the right and finally travels 5km towards the east, how far is he from his starting place?

(a) 5.5 kms
(b) 3 km
(c) 13 km
(d) 6.4 km

Ans. (b)

43) X's father's wife's father's granddaughter uncle will be related to X as

(a) Son
(b) Nephew

(c) Uncle
(d) Grandfather

Ans. (c)

44) Find the next number in the series 1, 3 ,7 ,13 ,21 ,31

(a) 43
(b) 33
(c) 41
(d) 45

Ans. (a)

45) If in a certain code "RANGE" is coded as 12345 and "RANDOM" is coded as 123678.
????
Then the code for the word "MANGO" would be

(a) 82357
(b) 89343
(c) 84629
(d) 82347

Ans. (d)

46) If "PROMPT" is coded as QSPLOS ,then "PLAYER" should be

(a) QMBZFS
(b) QWMFDW
(c) QUREXM
(d) URESTI

Ans. (a)
?
The questions are based on the following data
6 people A,B,C,D,E and F sit around a table for dinner.
Since A does not like C, he doesn't sit either opposite or beside C.
B and F always like to sit opposite each other.

47) If A is beside F then who is are the two neighbours of B?
(a) D and C
(b) E and C
(c) D and E
(d) Either (a) or (b)
Ans. (c)

48) If D is adjacent to F then who is adjacent to C?

(a) E and B
(b) D and A
(c) D and B
(d) either (a) or (c)

Ans.(d)

49) Complete the sequence A, E ,I ,M ,Q ,U , _ , _

(a) B, F
(b) Y, C
(c) G, I
(d) K, O

Ans.(b)

50) A person travels 6km towards west, then travels 5km towards north ,
then finally travels 6km towards west. Where is he with respect

to his starting position?

(a) 13km east
(b) 13km northeast
(c) 13km northwest
(d) 13km west

Ans. (c)

51) If A speaks the truth 80% of the times, B speaks the truth 60% of the times.
???? What is the probability that they tell the truth at the same time

(a) 0.8
(b) 0.48
(c) 0.6
(d) 0.14

Ans.(b)

52) If the time quantum is too large, Round Robin scheduling degenerates to

(a) Shortest Job First Scheduling
(b) Multilevel Queue Scheduling
(c) FCFS
(d) None of the above

Ans. (c)

53) Transponders are used for which of the following purposes

(a) Uplinking
(b) Downlinking
(c) Both (a) and (b)
(d)? None of the above

Ans. (c)

58) The format specifier "-%d" is used for which purpose in C

(a) Left justifying a string
(b) Right justifying a string
(c) Removing a string from the console
(d) Used for the scope specification of a char[] variable

Ans. (a)

59) A sorting algorithm which can prove to be a best time algorithm in
one case and a worst time algorithm in worst case is

(a) Quick Sort
(b) Heap Sort
(c) Merge Sort
(d) Insert Sort

Ans. (a)
60) What details should never be found in the top level of a top-down design?

(a) Details
(b) Coding
(c) Decisions
(d) None of the above

Ans. (c)

61) In an absolute loading scheme, which loader function is accomplished by assembler

(a) Reallocation
(b) Allocation
(c) Linking
(d) Both (a) and (b)

Ans. (d)

62) Banker's algorithm for resource allocation deals with

(a) Deadlock prevention
(b) Deadlock avoidance
(c) Deadlock recovery
(d) None of these

Ans. (b)

63) Thrashing can be avoided if

(a) The pages, belonging to the working set of the programs, are in main memory
(b) The speed of CPU is increased
(c) The speed of I/O processor are increased
(d) All of the above

Ans. (a)

64) Which of the following communications lines is best suited to interactive processing applications?

(a) Narrowband channels
(b) Simplex channels
(c) Full-duplex channels
(d) Mixedband channels

Ans. (b)

65) A feasibility document should contain all of the following except

(a) Project name
(b) Problem descriptions
(c) Feasible alternative
(d) Data flow diagrams

Ans. (d)

66) What is the main function of a data link content monitor?

(a) To detect problems in protocols
(b) To determine the type of transmission used in a data link
(c) To determine the type of switching used in a data link
(d) To determine the flow of data

Ans. (a)

67) Which of the following is a broadband communications channel?

(a) Coaxial cable
(b) Fiber optic cable
(c) Microwave circuits
(d) All of the above

Ans. (d)

68) Which of the following memories has the shortest access time?

(a) Cache memory

(b) Magnetic bubble memory
(c) Magnetic core memory
(d) RAM

Ans. (a)

69) A shift register can be used for

(a) Parallel to serial conversion
(b) Serial to parallel conversion
(c) Digital delay line
(d) All the above

Ans. (d)

70. In which of the following page replacement policies, Balady's anomaly occurs?

(a) FIFO
(b) LRU
(c) LFU
(d) NRU

Ans. (a)

71. Subschema can be used to

(a) Create very different, personalised views of the same data
(b) Present information in different formats
(c) Hide sensitive information by omitting fields from the sub-schema's description
(d) All of the above

Ans. (d)

72) abcD+abcd+aBCd+aBCD

then the simplified function is

(Capital letters are copliments of corresponding letters

A=compliment of a)

[a] a [b] ab [c] abc [d] a(bc)* [e] mone

(bc)*=compliment of bc

Ans: e

73) A 12 address lines maps to the memory of

[a] 1k bytes [b] 0.5k bytes [c] 2k bytes [d] none

Ans: b

74) In a processor these are 120 instructions . Bits needed to impliment

this instructions

[a] 6 [b] 7 [c] 10 [d] none

Ans: b

75) In 8085 microprocessor READY signal does.which of the following

is incorrect statements

[a]It is input to the microprocessor
[b] It sequences the instructions

Ans : b

76) Return address will be returned by function to

[a] Pushes to the stack by call

Ans : a

77) n=7623

```
{
     temp=n/10;
     result=temp*10+ result;
    n=n/10
}
```

Ans : 3267

78) In a compiler there is 36 bit for a word and to store a character 8bits are needed. IN this to store a character two words are appended .Then for storing a K characters string, How many words are needed.

[a] 2k/9 [b] (2k+8)/9 [c] (k+8)/9 [d] 2*(k+8)/9 [e] none

Ans: a

79) C program code

```
int zap(int n)
{
 if(n<=1)then zap=1;
 else  zap=zap(n-3)+zap(n-1);
}
```

then the call zap(6) gives the values of zap
[a] 8 [b] 9 [c] 6 [d] 12 [e] 15

Ans: b

Technical
---

80) Virtual memory size depends on
[a] address lines [b] data bus
[c] disc space [d] a & c [e] none

Ans : a

81) Critical section is
[a]
[b] statements which are accessing shared resourses
Ans : b

82) load a
mul a

```
store t1
load  b
mul   b
store t2
mul t2
add t1
```

then the content in accumulator is

Ans : a**2+b**4

83) Which of the following exchanges positive ions

(a).cl-
(b) nh2-
(c) ch2

Ans. (b)

84) After execution of CMP, a instruction in Intel 8085 microprocessor

(a) ZF is set and CY is reset.
(b) ZF is set CY is unchanged
(c) ZF is reset, CY is set
(d) ZF is reset , CY is unchanged .

Ans. ZF is set and CY is reset

85) Find sum of 3 + 5/(1+22) + 7/(1 + 22 + 32) + ...

Ans. 3n/(1 + n)

The following are few sample questions that maybe asked in the software paper.
We haven't been able to give the values in certain problems ;
only the type of questions have been mentioned.

86) What sorting algos have their best and worst case times equal ?

Ans. O(nlogn) for mergesort and heap sort

87) What page replacement algo . has minimumn number of page faults ?

Ans. Optimality algorithm

88) What is the use of virtual base class in c++

Ans. Multiple lines between derived classes.

89) Convert the infix to postfix for A-(B+C)*(D/E)

Ans. ABC+DE/*-

90) Assignment operator targets to

Ans. l-value

91) A byte addressable computer has memory capacity of 2 power m Kbytes
and can perform 2 power n operations an instruction involving three
operands and one operator needs maximum of ---bits

Ans. 3m + n

92) In round robin scheduling, if time quatum is too large then it degenerates to

Ans. FCFS

93) Picard's method uses _____?

Ans. Successive Differentiation.

94) 33 1/3 of 101 + 296 is

(ans 1200) check

95) 0.625= ?

ans 27/40

96) One ship goes along the stream direction 28 km and in opposite

direction 13 km in 5 hrs for each direction.What is the velocity

of stream?

ans 1.5 kmph

97) Cubic root of 3375=?

ans 15

98) 2020201-565656=?

ans 1454545

99) CHAIRS PROBLEM

5 chairs=9 tables,12 tables = 7 stools likethat- - -

ans 80Rs

100) One clock ringes 7 O'clock in 7 sec.In how many seconds it will

ring 10 O'clock.

ans 10.5 sec

101) One watch is showing 30 past 3 .What is the angle between minutes &

hours hand?

ans 75 degrees

102) The average of 4 consecutive even numbers is 27. What is the largest

number?

ans 30

103) 25 stations ,24 stations are inbetween- - - - -

how many tickets should be required.

ans 25*24=600)PUZZLES TO PUZZLE YOU "S.DEVI"PROB 24

104) One ball was dropped from 8ft height and every time it goes half

of the height. How much distance it will travell before coming to rest.

ans 24 approximately

105) Two trains are travelline at equilateral .Train A is travelling in the direction of earths spin.Other train B is travelling in opposite direction of earths spin.Which trains wheels will wear first?and why?

ans TRAIN B .Because of less centrifugal force.

106) 5,5,,13,13,21,21

Ans: 29

107) 0,7,26,63,124,

Ans: 215 i.e.n**3-1 rule following

108) 1,3,5,7,

Ans: 9 '1' is not a prime number

109) If a person walks at 4/5th of his usual spee he reaches 40min late. If he walks athis usual speed how much time does he travels.

Ans:160min or 2hr 40min

110) Two trains A&B start at opposite points 120km at 60kmph. A fly starting along with train A at 120kmph reaches B then returns back to touch and continue. By the time two trains meet howmuch distance the fly would have travelled?

Ans : By 1hour both trains meet, so the distance travel by fly in 1hr is 120km.

111) In a class 80% have passed english,70% passed Hindi 10% didnot passed either. If 144 students passed both. What is the total strength of the class.

Ans: 240

112) Find the least number when divided by 7 gives the reminder 6, when divided by 6 gives reminder 5, when divided by 5 gives reminder 4 and so on....

Ans: 419

113) If a man stands in front of sun what is the first letter of the direction which is left to him:

Ans: North(N)

114)A square is to circle what is cube to

Ans: sphere

115) Synonyms

i) Joy = gay

ii) Inert = Inactive

116) xy-x+2y = 6 equation is shifted to form equation xy=c what is c?

Ans : 4

117)When x is real what is the least value of (x**2-6*x+5)/(x**2+2*x+1)

Ans:-1/3

118) Convert 251 decimal to base 8(i.e. octal)?

Ans: similar question but for this question answer is 373

119) How much information can be solved in 1 byte of a IBM pc compatible?

Ans: 256

120)What is the language used for Artificial Intelligence

Ans: lisp

121) Swap two variables without using temporary variable

Ans: a= a+b;
b= a-b;
a= a-b:

122)Which is not the operating system ?

Ans: BIOS

123) What is the optimum number of operations for 2*(x**3)+3*(x**2)+5*x+5?

Ans: three multiplications, three additions.

124) A=> Bmeans

Ans: if A is true B has to be true

125)If A is not invertible and BA = I is not possible

Ans: Determinant is Zero.

126) What is FREE BoDY Diagram

Ans: Used for analysing FEM.

127). Out of 10 white, 9 black and 7 red balls,
in how many ways can we select one or more balls

(a) 234
(b) 52
(c) 630
(d) 879

Ans. (d)

128) A and B throw a dice. The probabilty that
A's throw is not greater than B's is

(a) 5/12
(b) 7/12
(c) 11/12
(d) 5/36

Ans. (b)

129) Given two numbers a and b. Let A denote the
single AM between these and S denote the sum of n AMs
between them. Then S/A depends upon

(a) n
(b) n,a
(c) n,b
(d) n,a,b

Ans. (a)

130) If the sum of the roots of the equation ax?+bx+c=0
is equal to the sum of the squares of their reciprocals,
then, a/c, b/a, c/b are in

(a) AP
(b) GP
(c) HP
(d) None of the these

Ans. (c)

In the following questions ~ represents the integral sign-for
eg. 1~2[f(x)] means integration of
the function f(x) over the interval 1 to2.

131) Value of -1~2[|2-x?|]dx, ie integration of the function |2-x?|
over the interval -1 to 2.

(a) 0
(b) 1
(c) 2
(d) None of the above

Ans. (d)

132) If 0~P[log sinx]dx=k,then the value
of 0~P/4[log(1 + tan x)]dx ,where P stands for pi,is

(a) -k/4
(b) k/4
(c) -k/8
(d) k/8

Ans. (c)

133) If a,b,c be in GP and p,q be respectively AM between
a,b and b,c then

(a) 2/b=1/p+1/q
(b) 2/b=1/p-1/q
(c) 2=a/p-c/q
(d) None of the above

Ans. (a)

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and two statements giving certain data.
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(C) If both statements together are sufficient but neither of statements alone is sufficient.
(D) If both together are not sufficient.

134) What is John's age?

(I) In 15 years John will be twice as old as Dias would be
(II) Dias was born 5 years ago

Ans. (C)

135) What is the distance from city A to city C in kms?

(I) City A is 90 kms from City B
(II) City B is 30 kms from City C

Ans. (D)

136)Is A=C ? A,B,C are real numbers

(I) A-B=B-C
(II) A-2C = C-2B

Ans. (C)

137) What is the 30th term of a given sequence ?

(I) The first two terms of the sequence are 1,1/2
(II) The common difference is -1/2

Ans. (A)

138) Was Avinash early, on time or late for work?

(I) He thought his watch was 10 minutes fast
(II) Actually his watch was 5 minutes slow

Ans. (D)

139) What is the value of A if A is an integer?

(I) A4 = 1
(II) A3 + 1 = 0

Ans. (B)

140) A person travels 12 km in the southward direction and then travels 5km to the right and then travels 15km toward the right and finally travels 5km towards the east, how far is he from his starting place?

(a) 5.5 kms
(b) 3 km
(c) 13 km
(d) 6.4 km

Ans. (b)

141) X's father's wife's father's granddaughter uncle will be related to X as

(a) Son
(b) Nephew
(c) Uncle
(d) Grandfather

Ans. (c)

142) Find the next number in the series 1, 3 ,7 ,13 ,21 ,31

(a) 43
(b) 33
(c) 41
(d) 45

Ans. (a)

143) If in a certain code "RANGE" is coded as 12345 and "RANDOM" is coded as 123678. Then the code for the word "MANGO" would be

(a) 82357
(b) 89343
(c) 84629
(d) 82347

Ans. (d)

144) If "PROMPT" is coded as QSPLOS ,then "PLAYER" should be

(a) QMBZFS
(b) QWMFDW
(c) QUREXM
(d) URESTI

Ans. (a)

The questions 52-53 are based on the following data

6 people A,B,C,D,E and F sit around a table for dinner.
Since A does not like C, he doesn't sit either opposite
or beside C.B and F always like to sit opposite each other.

145) If A is beside F then who is are the two neighbours of B?

(a) D and C
(b) E and C
(c) D and E
(d) Either (a) or (b)

Ans. (c)

146)53. If D is adjacent to F then who is adjacent to C?

(a) E and B
(b) D and A
(c) D and B
(d) either (a) or (c)

Ans.(d)

147) Complete the sequence A, E ,I ,M ,Q ,U , _ , _

(a) B, F
(b) Y, C
(c) G, I
(d) K, O

Ans.(b)

148) A person travels 6km towards west, then travels 5km towards north ,
then finally travels 6km towards west. Where is he with respect to
his starting position?

(a) 13km east
(b) 13km northeast
(c) 13km northwest
(d) 13km west

Ans. (c)

149) If A speaks the truth 80% of the times, B speaks the truth 60% of the times.
What is the probability that they tell the truth at the same time

(a) 0.8
(b) 0.48
(c) 0.6
(d) 0.14

Ans.(b)

150) Seven different toys are distributed among 3 children

how many different ways are possible?
(a) 7C3
(b) 7P3
(c) 3 7
(d) 7 3

Ans. (c)

151) A, B ans C are three speakers. They have to speak randomly
along with another 5 speakers in a function.
A has to speak before B and B has to speak before C. What is the probability.

Ans. 1/6

152) If dy = (secx + ytanx)dx,? Then the curve is

(a) x = ycosx
(b) x = ysinx
(c) x = ytanx
(d) x = ysecx

Ans. (a)

153) Two series are 16,21,26.... and 17,21,25.....
??????? What is the sum of first hundred common numbers
(a) 101100
(b) 110100
(c) 101110
(d) 110101

Ans. (a)

154) There are two sections in a question paper each contain five questions.
A students has to answer 6 questions.?? Maximum no. of questions that
can be answered from any section is 4. How many ways he can attempt the paper?

(a) 50
(b) 100
(c) 120
(d) 200

Ans. (d)

155) a and b are two numbers selected randomly from
1,2,3.... 25 what is the probability of a and b are not equal.

(a) 1/25
(b) 24/25
(c) 13/25
(d) 2/25

Ans. (b)

156) The sum of the series 1 + 1(1+1/n) + 3(1+1/n)2 + ... is equal to?

Ans. n2

157) Two circles of different radii intersects each other
what is the maximum no of intersections

(a) 0
(b) 1
(c) 2
(d) 3

Ans. (c)

158) If? x= sin-1(t), y = log(1-t2), find d2y/dx2 when? t=1/2

(a) 1
(b) 0
(c) -8/3
(d) -2/3

Ans. (c)

159) If x approaches infinity , then (nex dx)/(ne2xdx) is ?

(a) 1
(b) 0
(c) -1
(d) 2

Ans. (a)

160) If f(x)=1-cos(1-cosx)/x4 is continuos at f(0) then what is x

(a) 1
(b) 0
(c) 1/4
(d) -1/4

Ans. (c)

161) For the word SURITI, if you arrange the letters in dictionary order then what is its rank?

(a) 234
(b) 235
(c) 236
(d) 237

Ans. (c)

162) Period of sin ((2t + 3) / 6 pi)

(a) 6pi
(b) 6pi2
(c) 3pi

Ans. (b)

TECHNICAL

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1. An electron moving in an electromagnetic field moves in a

(a) In a straight path
(b) Along the same plane in the direction of its propagation
(c) Opposite to the original direction of propagation
(d) In a sine wave

Ans. (b)

2. The total work done on the particle is equal to the change in its kinetic energy

(a) Always
(b) Only if the forces acting on the body are conservative.
(c) Only if the forces acting on the body are gravitational.
(d) Only if the forces acting on the body are elastic.

Ans. (a)

3. The following unit measure energy:

(a) Kilo-watt hour.
(b) Volt*volt/sec*ohm.
(c) Pascal*foot*foot
(d) (Coulomb*coulomb)*farad

Ans. (a)

4. Astronauts in stable orbits around the earth are in a
state of weightlessness because

(a) There is no gravitational force acting on them.
(b) The satellite and the air inside it have an acceleration
equal to that of gravitational acceleration there.
(c) The gravitational force of the earth and the sun balance giving null resultant.
(d) There is no atmosphere at the height at which the satellites move.

Ans. (b)

5. An organ pipe, open at both ends and another organ pipe closed at one end,
will resonate with each other, if their lengths are in the ratio of

(a) 1:1
(b) 1:4
(c) 2:1
(d) 1:2

Ans. (c)

6. During an isothermal expansion of an ideal gas

(a) Its internal energy increases.
(b) Its internal energy decreases.
(c) Its internal energy does not change.
(d) The work done by the gas is not equal to the
quantity of heat absorbed by it.

Ans. (c)

7. A parallel plate capaciator is charged and the charging battery
is then disconnected.If the plates of the capacitor are moved further
apart by means of insulating handles

(a) The charge on the capacitor increases.
(b) The voltage across the plates increases.
(c) The capacitance increases.
(d) The electrostatic energy stored in the capacitor decreases.

Ans. (b)

8. Two equal negative charges q are fixed at point
(0,a) and (0,-a) on the y-axis.
A positive charge Q is released from rest at the
point (2a,0) on the x-axis. The charge Q will

(a) Execute simple harmonic motion about the origin
(b) Move to the origin and remain at rest
(c) Move to infinity
(d) Execute oscillatory but not simple harmonic motion

Ans. (d)

9. A square conducting loop of length Lon a side carries a current I.
The magnetic field at the centre of the loop is

(a) Independant of L
(b) Proportional to L*L
(c) Inversely proportoinal to L
(d) Directly proportional to L

Ans. (c)

10. The focal length of a convex lens when placed in air
and then in water will

(a) Increase in water with respect to air
(b) Increase in air with respect to water
(c) Decrease in water with respect to. air
(d) Remain the same

Ans. (a)

11. The maximum kinectic energy of the photoelectron
emitted from the surface is dependant on

(a) The intensity of incident radiation
(b) The potential of the collector electrode
(c) The frequency of incident radiation
(d) The angle of incidence of radiation of the surface

Ans. (c)

12. An electron orbiting in a circular orbit
around the nucleus of the atom

(a) Has a magnetic dipole moment
(b) Exerts an electric force on the nucleus equal to that on it by the nucleus
(c) Does not produce a magnetic induction at the nucleus
(d) All of the above

Ans. (d)

13. The X-rays beam coming from an X-ray tube will be:

(a) Monochromatic
(b) Having all wavelengths smaller than a certain minimum wavelength
(c) Having all wavelengths larger than a certain minimum wavelength
(d) Having all wavelengths lying between a minimum and a maximum wavelength

Ans. (c)

14. The mass number of a nucleus is

(a) Always less than its atomic number
(b) Always more than its atomic number
(c) Always equal to its atomic number
(d) Sometimes more and sometimes equal to its atomic number

Ans. (d)

15. Two successive elements belonging to the first transition series have the same number of electrons partially filling orbitals. They are

(a) V and Cr
(b) Ti and V
(c) Mn and Cr
(d) Fe and Co

Ans. (c)

16. When n+l has the same value for two or more orbitals, the new electron enters the orbital where

(a) n is maximum
(b) n is minimum
(c) l is maximum
(d) l is minimum

Ans. (b)

17. A balloon filled with ethylene is pricked with a sharp pointed needle and quickly placed in a tank full of hydrogen at the same pressure. After a while the balloon would have

(a) Shrunk
(b) Enlarged
(c) Completely collapsed
(d) Remain unchanged in size

Ans. (b)

18. Which of the following statements is not true?

(a) The ratio of the mean speed to the rms speed is independant of temperature
(b) The square of the mean speed of the molecules is equal to the mean squared speed at a certain temperature
(c) Mean kinetic energy of the gas molecules at any given temperature is independant of the mean speed
(d) None

Ans. (b)

19. Which of the following statements represent Raoult's Law

(a) Mole fraction of solvent = ratio of vapour pressure of the solution to vapour pressure of the solvent
(b) Mole fraction of solute = ratio of vapour pressure of the solution to vapour pressure of the solvent
(c) Mole fraction of solute = lowering of vapour pressure of the solution
(d) Mole fraction of solvent = lowering of vapour pressure of the solution

Ans. (a)

20. Elements having the same atomic number and the same atomic mass are known as

(a) Isotopes
(b) Isotones
(c) Isomers

(d) None of the above

21.Which is the most acidic amongst

(a) Nitrophenol
(b) O-toulene
(c) Phenol
(d) Cresol

22. Pure water does not conduct electricity because it is

(a) Almost not ionised
(b) Low boiling
(c) Neutral
(d) Readily decomposed

Ans. (a)

23. In a salt bridge, KCl is used because

(a) It is an electrolyte
(b) The transference number of K+ and Cl? is nearly the same
(c) It is a good conductor of electricity
(d) All of the above

Ans. (d)

24. A depolarizer used in the dry cell batteries is

(a) KCl
(b) MnO2
(c) KOH
(d) None of the above

Ans. (b)

25. The hydrolysis of alkyl halides by aqueous NaOH is best termed as

(a) Electrophylic substitution reaction
(b) Electrophylic addition reaction
(c) Nnucleophylic addition reaction
(d) Nucleophylic substitution reaction

Ans. (d)

26. The hydrocarbon that gives a red precipitate with
ammoniacal cuprous chloride is (where '?' means a triple bond)

(a) CH3-CH2-CH2-CH3
(b) CH3-C?C-CH3
(c) CH2=CH-CH=CH2
(d) CH3-CH2-C?CH

Ans. (d)

27. Which of the following reagents is neither neutral nor basic

(a) Lucas' reagent
(b) Tollen's reagent

(c) Bayer's reagent
(d) Fehling's solution

Ans. (a)

28. The substance which is most easily nitrated

(a) Toluene
(b) Bbenzene
(c) Nitrobenzene
(d) Chlorobenzene

Ans. (a)

29. Carbylamine reaction is a test for

(a) Primary amine
(b) Secondary amine
(c) Tertiary amine
(d) Quarternary ammonium salt

Ans. (a)

30. Which of the following oxides cannot be reduced by carbon to obtain metal

(a) ZnO
(b) Al2O3
(c) Fe2O3
(d) PbO

Ans. (b)

31. Which of the following is not an oxide ore?

(a) Cassiterite
(b) Siderite
(c) Pyrolusite
(d) Bauxite

Ans. (b)

32. Which among the following is called philosopher's wool

(a) Cellulose
(b) Calamine
(c) Stellite
(d) Cerussite

Ans. (c)

33. A solution of KMnO4 is reduced to MnO2 .
The normality of solution is 0.6.The molarity is

(a) 1.8M
(b) 0.6M
(c) 0.1M
(d) 0.2M

Ans. (d)

34. If the time quantum is too large, Round Robin scheduling degenerates to

(a) Shortest Job First Scheduling
(b) Multilevel Queue Scheduling
(c) FCFS
(d) None of the above

Ans. (c)

35. Transponders are used for which of the following purposes

(a) Uplinking
(b) Downlinking
(c) Both (a) and (b)
(d) None of the above

Ans. (c)

36. The format specifier "-%d" is used for which purpose in C

(a) Left justifying a string
(b) Right justifying a string
(c) Removing a string from the console
(d) Used for the scope specification of a char[] variable
Ans. (a)

37. Virtual functions allow you to

(a) Create an array of type pointer-to-base-class
that can hold pointers to derived classes
(b) Create functions that have no body
(c) Group objects of different classes so
they can all be accessed by the same function code
(d) Use the same function call to execute
member functions to objects from different classes

38. A sorting algorithm which can prove to be a best time algorithm in one case
and a worst time algorithm in worst case is

(a) Quick Sort
(b) Heap Sort
(c) Merge Sort
(d) Insert Sort

Ans. (a)

39. What details should never be found in the top level
of a top-down design?

(a) Details
(b) Coding
(c) Decisions
(d) None of the above

Ans. (c)

40. In an absolute loading scheme, which loader function
is accomplished by assembler

(a) Reallocation
(b) Allocation

(c) Linking
(d) Both (a) and (b)

Ans. (d)

41. Banker's algorithm for resource allocation deals with

(a) Deadlock prevention
(b) Deadlock avoidance
(c) Deadlock recovery
(d) None of these

Ans. (b)

42. Thrashing can be avoided if

(a) The pages, belonging to the working set of the programs, are in main memory
(b) The speed of CPU is increased
(c) The speed of I/O processor are increased
(d) All of the above

Ans. (a)

43. Which of the following communications lines is best suited to interactive processing applications?

(a) Narrowband channels
(b) Simplex channels
(c) Full-duplex channels
(d) Mixedband channels

Ans. (b)

44. A feasibility document should contain all of the following except

(a) Project name
(b) Problem descriptions
(c) Feasible alternative
(d) Data flow diagrams

Ans. (d)

45. What is the main function of a data link content monitor?

(a) To detect problems in protocols
(b) To determine the type of transmission used in a data link
(c) To determine the type of switching used in a data link
(d) To determine the flow of data

Ans. (a)

46. Which of the following is a broadband communications channel?

(a) Coaxial cable
(b) Fiber optic cable
(c) Microwave circuits
(d) All of the above

Ans. (d)

47. Which of the following memories has the shortest access time?

(a) Cache memory
(b) Magnetic bubble memory
(c) Magnetic core memory
(d) RAM

Ans. (a)

48. A shift register can be used for

(a) Parallel to serial conversion
(b) Serial to parallel conversion
(c) Digital delay line
(d) All the above

Ans. (d)

49. In which of the following page replacement policies, Balady's anomaly occurs?

(a) FIFO
(b) LRU
(c) LFU
(d) NRU

Ans. (a)

50. Subschema can be used to

(a) Create very different, personalised views of the same data
(b) Present information in different formats
(c) Hide sensitive information by omitting fields from the sub-schema's description
(d) All of the above

Ans. (d)

51. Two bodies changed from p1v1 to p2v2 state in two ways.
The heat supplied is delta Q and work done is delta W
???? Then what is constant in these two processes

(a) delta q
(b) delta w
(c) delta q + delta w
(d) delta q - delta w

Ans. (d)

52. _____ have same atomic number and same mass number are

(a) Isotopes
(b) Isotones
(c) Isomers
(d) Isobars

Ans. (c)

53. Name the phenomena in which one proton is jumped from
one isomer to another isomer to create two different elements

(a) functional isomerisim
(b) sterio merisim
(c) tauto merisim
(d) penta merisim

Ans. (c)

54. In the below compounds which one has 40% C ,6.7% H and? 53.3 % O what is its empherical formula

(a) CHO
(b) CH_2
(c) $C_2H_2O_2$
(d) $C_2H_3O_2$

Ans: (b)

55. X rays are coming from X ray tube, the wavelength is _____ a certain wavelength/s

(a) below
(b) above
(c) inbetween
(d) out of

Ans. (c)

56. In a triode valve in order to increase the saturation current what has to be done

(a) increase plate voltage
(b) reduce distance between grid and plate
(c) increase cathode potential
(d) reduce grid potential

Ans. (d)